

REPORT OF THE DATA MANAGEMENT WORKGROUP
NPS Northeast Coastal and Barrier Network

February 16, 2001 (DRAFT)

Workgroup Members

Mark Adams
Cape Cod National Seashore

Hugh Devine
Field Technical Support Center
NC State University

Stephen Hale
USEPA Atlantic Coastal Ecology Lab

Elizabeth Johnson
NPS-Boston Support Office

Charles LaBash
Field Technical Support Center
Univ. of Rhode Island

Charles Rafkind
Colonial National Historical Park

Dafna Reiner
Assateague Island National Park

Charles Roman, workgroup chair
USGS

Bill Slocumb
Field Technical Support Center
NC State University

Mark Wotawa
NPS - I&M Program - Ft. Collins

The Data Management Workgroup for the NPS Coastal and Barrier Network convened at the University of Rhode Island (February 7-8, 2001) and engaged in discussions on approaches to data management throughout the Network and on implementation strategies. The Workgroup accomplished the following;

- Identified the fundamental components of a Network Data Management Plan
- Recommended strategies for implementation of a Network Data Management Program
- Recommended approaches to follow toward actual preparation of a Network Data Management Plan

1. Fundamental Components of a Data Management Plan

This aspect of the workgroup's discussion was quite simple. The NPS Servicewide Inventory and Monitoring Program is in the final stages of completing the "Natural

Resources Data and Information Systems Handbook.” This Handbook, now available in draft form, documents in great detail the components of a Data Management Plan. Chapters in the Handbook address the following; defining data management, steps to developing a data management plan, procedures for handling data, guidelines for managing document collections, metadata development, and review of natural resource databases and information systems.

It is recommended that the Handbook be carefully followed during preparation of the Coastal and Barrier Network Data Management Plan. The Handbook’s chapter on “Developing a Data Management Plan” addresses topics related to administrative structure for data management personnel, data ownership, QA/QC, data maintenance, legacy data, data security, hardware and software inventories and maintenance, archives, metadata documentation, data purging policies, data management standards, staffing, budgets, and others. When the network data management plan is written, all of the topics identified in the Handbook must be addressed with specific reference to the eight parks of the Coastal and Barrier Network. The Handbook is very detailed, but generic.

2. Implementation Strategies

Possible scenarios for implementation of a Plan could include the following. These scenarios would all include oversight by a full-time Network Data Management Coordinator;

- Centralize at an FTSC
- Centralize at prototype Cape Cod; or Cape Cod and Assateague
- Each park has data management staff
- Combination of the above

There was some consensus that all parks in the Network will need some data management capability available at the park. The Data Management Plan should investigate a model whereby larger parks or those with established data management capabilities serve as hosts for satellite parks in the Network. Personnel, hardware and software could be shared. Data management personnel at the parks must work with field personnel to verify that data meet standards set forth in the Data Management Plan and Sampling Protocols, maintain metadata, maintain a reports library, provide data backups, deal with issues of data migration and legacy data, and train field personnel on data entry procedures.

At the Network level, it is recommended that a full-time (GS-12) Network Information Management Coordinator be hired. The Coordinator will interact with the parks and NPS-Ft. Collins, interact with other Networks, manage the Network Data Repository, and facilitate use of non-NPS databases (e.g., USGS, EPA, NOAA, states). The Coordinator should work especially closely with those parks that may not have full-time data management staff.

To facilitate communication among Network staff, it is recommended that the Network Information Management Coordinator be co-located with the Network Coordinator.

There was considerable discussion regarding the role of Field Technical Support Centers. Both NC State and URI have strong capabilities in data management and GIS and have developed strong working relationships with the parks in the Network. It would be ideal if the Network Information Management Coordinator were located at an FTSC, thereby benefiting from the university capabilities and resources.

3. Who prepares the Network Data Management Plan

No recommendation will be made regarding an approach for getting a Data Management Plan written. However, two options seem appropriate.

- Hire a Network Information Management Coordinator and he/she writes the Plan
- Contract to a university within the Network. The university should have strong involvement with park natural resource programs (e.g., NC State FTSC, URI FTSC, Penn State)

Given that NPS-Ft. Collins has prepared the “Natural Resources Data and Information Systems Handbook,” the Workgroup thinks that much of the initial effort in Plan development is already completed. It is suggested that a Network Data Management Plan could be drafted within a 6-month timeframe. While developing the Plan, visits and interviews with all Network parks, NPS-Ft. Collins, and FTSCs should be part of the process.